

TABLE OF CONTENTS

	<u>Page No.</u>
INTRODUCTION	1
DEFINITION	1
Theories of Causation	2
Treatment Measures	3
SOURCES OF CONTROVERSY	4
GOVERNMENT POLICY AND DIRECTION	5
Background	5
Current Policy	6
Future Direction	6
CONCLUSIONS	7
FOOTNOTES	9
APPENDIX	

INTRODUCTION

The history of environmental hypersensitivity (EH) is one of controversy and often heated debate. Known variously as "twentieth century disease," "total allergy syndrome" and "multiple allergy syndrome," its severity can range from a minor inconvenience to an illness so debilitating that the patient is incapable of living in the modern world.

The debate revolves around the fundamental questions of what it is and how to treat it. Affected patients and clinical ecologists (licensed medical practitioners specializing in EH) argue that it is a physiological reaction to chemicals in our environment while skeptics see EH as a psychosomatic (mentally induced) disorder. The debate continues today in an atmosphere of insufficient evidence on either side, increasing animosity and a greater polarization of opinion.

DEFINITION

Because of the uncertain nature of EH, a satisfactory definition is difficult to develop. In its report to the Ontario Ministry of Health, the Ad Hoc Committee on Environmental Hypersensitivity Disorders (Thomson Commission named after its Chairman Judge G. M. Thomson) suggested a working definition that can be used as a point of departure:

Environmental hypersensitivity is a chronic (i.e., continuing for more than three months) multisystem disorder, usually involving symptoms of the central nervous system and at least one other system. Affected persons are frequently intolerant to some foods and they react adversely to some chemicals and to environmental agents, singly or in combination, at levels generally tolerated by the majority. Affected persons have varying degrees of morbidity, from mild discomfort to total disability. Upon physical examination, the patient is normally free from any abnormal objective findings . . .¹

Specific examples of symptoms include depression, fatigue, irritability, poor concentration, migraine, and bowel and respiratory problems. This list is by no means an exhaustive one.

A partial list of substances affecting environmentally hypersensitive people include:²

- Chemical pollutants: natural gas fumes, tobacco smoke, food additives, odours from plastic furnishings, formaldehyde, pesticides, fungicides and herbicides;
- Common foods (usually those eaten most frequently or in the largest amounts): milk, wheat, eggs, nuts, corn, chocolate;
- Natural inhalants: pollens, dusts, animal danders, molds.

People who appear to be environmentally hypersensitive react to these substances at concentration levels far below that which would affect the majority of the population. In this way, EH reactions are similar to any standard allergic reaction. However, EH sufferers display no measurable physiological reaction to the allergen (reaction producing substance) and no laboratory evidence of disease. Traditional laboratory tests indicate that the patient is well yet he or she is experiencing a number of symptoms.

Theories of Causation

Clinical ecologists attribute EH to dysregulation or dysfunctioning of the immune system. This is thought to be triggered by fungal or viral infection or by emotional stress. A healthy body is not normally troubled by low levels of chemicals, but under the stress of one of these triggering events it may become unable to handle the combined effect of these different substances. As the Thomson Commission pointed out, this "total-load" concept of additive effects has the attraction of logic, but there is no experimental support for its role in EH. Regarding the postulated triggering events, analogous conditions such as AIDS puts the theory within the realm of possibility, but no direct evidence has yet been found to support this.

Treatment Measures

A list of the most commonly prescribed treatment measures used in the care of EH patients are presented below. The extent to which clinical ecologists prescribe various treatment measures for EH patients depends on the degree of sensitivity, the range of environmental agents found to produce symptoms and the presence or absence of a diagnosis for Candida albicans, a fungus commonly identified as a triggering agent.

The primary treatment methods include:³

- **Environmental Change:** This ranges from avoidance of suspected agents and minor lifestyle changes to the prescription of substantial environmental change in the home and/or work environment and lifestyle.
- **Dietary Change:** This may involve simple elimination of foods; the rotation of foods into and out of the diet; the use of vitamin and mineral supplements; the use of pure water and pure (organically grown) foods.
- **Therapeutic Extracts:** Neutralizing extracts (containing dilute solutions of the offending environmental agents) are given by intradermal (under the skin) injection by the physician, self administered, or taken in the form of sublingual (under the tongue) drops.
- **Treatments for Candida:** Anti-fungal agents and low carbohydrate, yeast free diets that create an environment that is not conducive to fungal growth in the body.

According to the Thomson Commission, the use of avoidance procedures and elimination diets can be supported by evidence, although few properly conducted investigations have been undertaken to clearly identify cause and effect. Extract therapy and the use of organically pure food and water have not, as yet, been scientifically demonstrated to be valid.

Patients who are severely sensitive to multiple environmental agents and are unable to be treated in a doctor's office have been referred by clinical ecologists to environmental control units in the United States or in England. These units are designed to provide an environment where the patient, removed from exposure to the airborne and contact substances that cause adverse reaction, is able to undergo testing and treatment.

The environmental control unit is often a floor of a hospital which is designed and constructed using only natural products and furniture. Both staff and patients are instructed to avoid the use of cosmetics and to avoid scented shampoo and deodorant. It is estimated that approximately one percent of environmentally hypersensitive people require the treatment programme provided in these units.⁴

Since the release of the Thomson Commission Report in 1985, the four environmental control units in the U.S. considered to be most reputable have all been closed. The reasons for closure range from the revocation of state operating licenses to the retirement of principal clinical ecologists. Currently, the only reputable units are located in England.⁵

Sources of Controversy

Much of the controversy surrounding the topic of EH arises because few of the causative theories, testing methods or treatment measures have been properly evaluated under experimentally rigorous conditions. Most clinical ecologists base their treatment upon case histories and uncontrolled test results that do not make use of standard testing procedures such as placebos (inert or ineffectual substance) and double blinds (neither the patient nor the doctor knows whether the treatment substance is a placebo or not). Without proper testing methods, it is impossible to determine whether positive results are due to physiological changes brought about by the treatment, or whether a psychological disorder has been corrected because the patient believes he or she has been cured.

Most of the opposition to the practise of clinical ecology arises within the medical profession. ~~Few doctors would deny that patients suffering from EH are ill and require assistance. However, they believe that in many cases, the illness is predominantly psychological rather than physiological.~~ A somatic (of or within the body) component may exist such as a basic allergy, hypoglycemia or premenstrual syndrome, but the effects of this component is amplified and expanded upon by the mind.

Cynthia Smith -
→ Helmutic - Ben Chubbard -
Pete Peter Seydmore

Process → right to expand →

8653751.

who?

analat

beisf...

The main objects of the opponents' criticism are the clinical ecologists who are seen as charlatans who are prescribing treatment that is not only ineffective, but can be physically harmful to the patient.⁶ ~~According to the physicians, clinical successes result from the fulfillment of a psychological need;~~ the identification of something that is making them sick, rather than any immunological reaction to the treatment.

GOVERNMENT POLICY AND DIRECTION

Background

In 1984, Keith Norton, Health Minister for the governing Progressive Conservatives, established the Ad Hoc Committee on Environmental Hypersensitivity Disorders. Under the chairmanship of Judge G.M. Thomson, the Ad Hoc Committee reported to the Minister of Health in August 1985. Prior to this study, most EH patients were diagnosed as being psychologically ill. ~~The Thomson Committee report recognized that this group of people was suffering and required special assistance.~~ It also recognized that certain aspects of the disease's causative theory and treatment were consistent with recent scientific findings, and that some of these theories were plausible, given our current level of medical understanding.

The main element that was lacking was properly conducted investigations into the efficacy of the treatment measures posed by clinical ecologists. Toward this end, the ~~Thomson Committee Report recommended the encouragement and funding of research into the causes and treatment of EH. Until such time that definitive results can be obtained, the Committee recommended an extension of financial assistance through OHIP to cover the cost of selected EH treatment measures which appeared to be effective and scientifically plausible.~~

The report also recommended the establishment of an environmental control unit in a Ontario hospital. This unit could be used to treat EH patients and to provide an ideal environment for properly controlled investigations.

In response to the Thomson Committee Report, the Ministry of Health established an Advisory Panel of medical experts to make comments and recommend changes. This panel agreed with Thomson that greater research was required but declined to support the expansion of OHIP funding to include EH treatment measures until tests were completed. Similarly, an environmental control unit was not supported until its effectiveness could be demonstrated empirically.

Current Policy

Currently, OHIP treats EH patients on a case by case basis. Since clinical ecologists are all practising physicians, their time and laboratory tests are covered. Not covered are the cost of treatments such as therapeutic extracts, Candida treatment, environment changes or special diets. Travel and accommodation costs for patients entering environmental control units in the U.S. have been covered in about a dozen circumstances, but again the cost of treatment measures were generally borne by the patient.⁷

The federal government did announce in December 1988 that selected items required to treat EH could be deducted from income for tax purposes as a medical expense provided a certificate from a licensed physician can be obtained. The list is still being formulated, but is expected to contain such items as air and water purifiers, or the cost of converting a non-electric furnace into an electric one.⁸

Future Direction

The provincial health ministry is currently reassessing its approach to EH. The present practice of funding EH patients on a case-by-case basis is expected to be replaced by a set of funding criteria so that patients are more aware of what is available to them. In addition, the Ministry is assessing the effectiveness of treatment in environmental control units in England and comparing them to facilities available in the province. If it is deemed that these facilities in England offer treatment that is effective and unavailable in Ontario, similar facilities will be established here. According to Health Ministry officials, new policy regarding EH funding can be expected soon.⁹

The Ministry is also actively encouraging research into the field of EH. On 10 February 1989, the Minister of Health announced \$600,000 in funding for research into food sensitivity and a similar announcement is expected soon on chemical toxics.¹⁰

~~Curiously, this money has been available for quite some time, but researchers appear reluctant to undertake the studies. It is possible that, due to the level of scepticism surrounding the topic within the scientific and medical communities, a research scientist does not wish to risk his or her reputation by being associated with such a topic.~~¹¹

On 10 February 1989, the Ministry also announced plans to establish a liaison committee to look into the subject of EH. The Committee would be made up of a broad range of specialists and lay persons with knowledge in the field to advise the Minister regarding research direction and general policy. The Committee's objective is to bring to the Minister a broad range of perspectives on the topic from that of the scientist through to that of the EH sufferer¹². This is in contrast to the previous advisory panel set up in 1986. This panel was composed entirely of medical specialists. As a result, clinical ecologists and EH patients felt that their arguments did not receive proper consideration. As yet, the membership of the committee has not been announced, but the chairman is Dr. Zimmerman, the same person who chaired the previous advisory panel.

In general, the Ministry acknowledges the fact that this group of patients are ill and are not being properly served by our health care system. The Ministry must act responsibly with public funds and has to be able to justify its expenditures. At the same time, the Ministry is required to provide a service to those who are currently suffering. ~~If justification for particular services to EH patients cannot be found in the scientific literature, how should the Ministry proceed? This is the dilemma facing the Ministry.~~

CONCLUSIONS

Environmental hypersensitivity is a disease that must be more clearly defined. The current working definition offered by the Thomson Committee is too broad. As a result it is likely to encompass other diseases, both somatic and psychological, that are currently treatable using other established methods. A more precise definition must map out a niche for EH that is unlike other recognized diseases. Once this group of patients can be identified (those that do not fit properly into any other recognized disease), then research into cause and treatment can begin in a more focussed and effective manner.

The highly polarized nature of the controversy may well point to the need for a more interdisciplinary approach to the question of EH in particular and to medicine in general. At present, EH is occupying an area between psychological and somatic disorders that practitioners on both sides are finding difficult to deal with. Since it does not fit neatly into either classification, it is treated as part of neither. AS a result, patients with legitimate illnesses are "falling between the cracks."

Clinical ecologists and EH patients charge that physicians classify EH as a psychological disorder because they are simply unable to identify the real cause and are afraid to admit it. ~~Physicians refuse to acknowledge the case for EH as a physiological ailment until experimental evidence can support it. The required evidence must emerge using an approach that is neither purely physiological, nor purely psychological, but is a complex mix of the two.~~ The Ministry is hoping that direction of this kind can be obtained from their new advisory committee.

FOOTNOTES

¹Ad Hoc Committee on Environmental Hypersensitivity Disorders (Chair, Judge G.M. Thomson) Report (Toronto: The Committee, August 1985), pp. 17-18.

²Ibid., p. 19.

³Ibid., pp. 186-187.

⁴Ibid., p. 204.

⁵Telephone interview with Anna Rose Spina, Senior Policy Analyst, Professional Services and Special Programme Section, Ministry of Health, 14 February 1989.

⁶Barry Zimmerman and Elizabeth Weber, "Candida and '20th-century disease'," Canadian Medical Association Journal 133 (15 November 1985): 965-966.

⁷Telephone interview with Dr. Ewen MacKenzie, Claims Payment Policy Advisor, Ministry of Health, 13 February 1989.

⁸Telephone interview with Robert Dubrule, Senior Tax Policy Officer, Personal Tax Analysis Division, Department of Finance, Ottawa, 13 February 1989.

⁹MacKenzie interview, 13 February 1989.

¹⁰Spina interview, 14 February 1989.

¹¹Ibid.

¹²Ibid.